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LGBTQ+ Stigma and Health Effects: A Systematic Review of the Global Literature

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Abstract

This systematic review examines the global literature on LGBTQ+ stigma and health. Indeed, the LGBTQ+ community has experienced a poignant history of stigma, resulting in adverse health consequences. The current review synthesizes 46 articles conducted in multiple cultural settings. The focuses of the selected articles varied from mental health, physical health, suicide, drug and alcohol use, HIV stigma, and healthcare among LGBTQ+ communities. The selected studies similarly found that stigma and discrimination against LGBTQ+ individuals have fueled adverse mental health and health behaviors. These risky behaviors included eating disorders, self-harm, suicide, substance use, unprotected sex, avoidance of healthcare appointments, perceived stigma, as well as healthcare provider (HCP) stigma. Racism in the LGBTQ+ community, racial/ethnic identities of LGBTQ+ individuals, and cultural rejection of homosexuality were also discussed. Future research should pay more attention to intersectional stigma and the social networks of LGBTQ+ communities.

Keywords: LGBTQ+, HIV/AIDS, STIs, stigma, health

1. Introduction

This systematic review examines the global literature on stigma and health among LGBTQ+ community members. Each community has individual health concerns and situations unique to its identity. We define LGBTQ+ as, with particular attention to underserved communities, including men who have sex with men (MSM), lesbian women, transgender or gender nonconforming (TGNC), sexual minority men/women (SMM/SMW), and queer and intersex identities.

Individuals who present themselves as gender non-conforming are more likely to be perceived as a sexual minority, resulting in greater vulnerability (Johnson & Ghavami, 2011; Rieger et al., 2010; Valentova et al., 2011). Stigma, prejudice, and discrimination create a hostile and stressful environment that causes mental health issues in minority communities (Meyer, 2003). Stigma, defined as a negative social attitude or devaluation attached to a characteristic of an individual and is considered mentally, physically, or socially inferior (Scott, 2022), can be exerted in multiple ways: verbal attacks, violence, heterosexism, or inattentive care (Gyamerah et al., 2020; Chan, 2022; Paine, 2021). Interacting with these behaviors negatively affects the health of LGBTQ+ individuals (Balsam et al., 2013; Douglass & Conlin, 2020; Hatzenbuehler, 2009; Meyer, 2003). In addition, stigma is more closely related to an individual's level of gender nonconformity in a specific cultural context rather than their sexuality (Rieger & Savin Williams, 2012). These findings point to the need for a worldwide view of LGBTQ+ health and stigma, especially in vulnerable subpopulations.

Multiple forms of stigma impact LGBTQ+ health concerns, with the most well-known example being the HIV epidemic that disproportionately affects MSM. HIV/AIDS appeared in the 1980s, affecting healthy young men in the United States; the CDC was not able to identify how this infection was transmitted, which caused the public to assume that HIV only affected gay men. Those diagnosed with HIV were then stigmatized, affecting how HIV was treated in healthcare spaces (CHLP, 2015). Today, these misconceptions still impact gay men, evinced by gay, bisexual, queer, and other MSM (GBQMSM) being more vulnerable to HIV (CDC, 2018). Therefore, more research on the intersection between stigma and health among disadvantaged communities has become essential. Further, this present-day threat of extensive stigma even translates into LGBTQ+ individuals being unable to get tested for HIV.

In addition, due to the stigma that surrounds HIV, the testing and disclosure of HIV status is still a struggle in LGBTQ+ communities. Sexual health is another aspect in which LGBTQ+ members are disparaged, as there are higher rates of HIV and other STIs (Logie, Navia, & Loutfy, 2015; Puckett et al., 2017; Hafeez et al., 2017). A recent survey revealed that 21% of their GBQMSM participants believed most people discriminated against people living with HIV (PLWH) (Beltran et al., 2020). Corroborating this sentiment, 17.5% of US adults feared physical contact with PLWH, while 12.5% expressed some moral judgment (Pitasi et al., 2018). Those trying to acquire HIV testing suffered from stigma for both their sexual behavior and their sexual orientation (Hutchinson et al., 2004), which in turn prevented these individuals from seeking HIV and other STI testing. Consequently, LGBTQ+ populations remain vulnerable to HIV/STIs, and LGBTQ+ HIV patients are at a greater risk of death (Leserman, 2008).

A few previous literature reviews examined specific health issues among LGBTQ+ communities. Aleshire's (2019) literature review showed that primary care providers (PCP) mainly had favorable opinions of LGBTQ+ individuals and suggested addressing disparities in healthcare on an individual case basis. Saraff's (2022) review on the stigma and Indian LGBTQ+ health demonstrated that social rejection negatively impacted Indian LGBTQ+ both psychologically and sexually. Finally, Correro (2020) reviewed the minority stress and cognitive decline of older LGBTQ+ individuals, exposing that long-term stress hormones accelerated brain aging, and suggested action toward the effort of preventing cognitive health risks. To extend these previous reviews, we intend to synthesize existing findings from numerous global studies on LGBTQ+ communities, capturing mental, sexual, and physical health. The current review intends to reveal the effects of stigma on LGBTQ+ health from a more comprehensive perspective. Broadening the scope of the reviewed research worldwide, spanning from high- and low-income countries, will allow us to grasp an extensive picture of the current situations on a global scale.

2. Methods

2.1 Inclusion Criteria

We identified studies that are: (1) peer-reviewed and published in English-language journals before January 17, 2023; (2) empirical studies using either qualitative or quantitative methodology; (3) studies that focused on LGBTQ+ (lesbian, gay, bisexual, transgender, queer) as the primarily targeted study population; (4) engaged in assessing the association between stigma and health issues (e.g., inequalities, discrimination, effects, etc.) among LGBTQ+ populations.

2.2 Data Sources

The literature search was conducted in January 2023 using four electronic bibliographic databases: CINAHL, PsycINFO, PubMed, and Web of Science. We generated a master list of search terms and tailored search queries to each electronic database. The search terms included "LGBTQ," "stigma," and "health." All citations were imported into EndNote Online for data management. The search of these four databases resulted in 714 total citations. After deleting duplications, 596 citations remained in the EndNote data set for further screening.

2.3 Screening

Citations were screened using a three-step process, including a title (and keyword) review, an abstract review, and an article review. All unduplicated records [n=596] were initially screened at the title review stage to exclude citations that did not provide empirical data for LGBTQ+ stigma and health effects. As a result, we excluded 373 articles: 18 irrelevant citations, 20 non-empirical studies, and 335 articles that focused on only one or two of our three primary topics of interest (i.e., LGBTQ, health, or stigma). At the abstract review stage, we excluded 142 of the remaining 223 articles either because they did not examine the relationships between stigma and health in LGBTQ+ populations or focused on only one of our three primary topics. At the article review stage, we excluded 32 of the remaining 81 articles because 25 did not provide data about the relationship between health and stigma of LGBTQ+ communities, and the remaining six focused on only one or two of our three primary topics. The three-step screening process left 49 peer-reviewed articles. The references of these 49 eligible articles were then hand-searched; at this stage, one additional article was identified. The search yielded 49 eligible articles reporting data from 46 studies for further analysis. Figure 1 illustrates the screening process for each step and presents the reasons for exclusion.

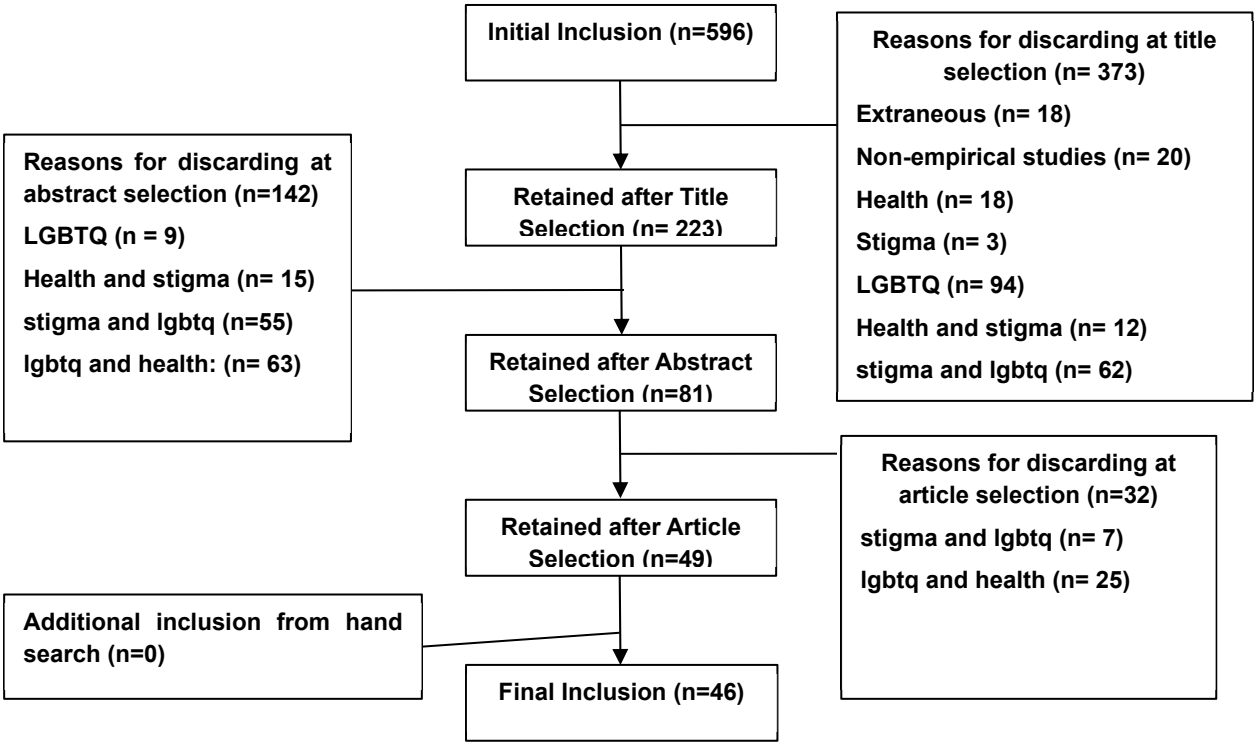

Figure 1. The screening process for each step and presents the reasons for exclusion

2.4 Data Abstraction

We developed structural data abstraction forms to retrieve study characteristics and significant findings from each of the 44 reviewed articles. We then created a table to display and categorize the study characteristics (e.g., study location, study sample and size, year of data collection, age of study sample, and study design) for each reviewed article. We also created a table (Appendix Table 1) that displays the discrimination faced by LGBTQ+ and the resulting impacts on health (mental/physical health, suicide ideality, alcohol/drug use, healthcare experiences, and HIV/AIDS/other diseases, PrEP) for the data we extracted.

3. Results

3.1 Characters of the Reviewed Studies

3.1.1 Study Sites and Publication Period

The key characteristics of the reviewed studies were summarized by authors, publication year, study site, year of data collection, study sample, sample size, sample's mean age, and the chosen study design. Participants in the selected studies were recruited from 15 different countries. 54% of the studies were based in the United States, in addition to 1 being based in Mexico, 1 in Brazil, 1 in Australia, 6 in Europe, 2 in Asia, and 2 in Africa. Nine studies were published before 2020, and the rest were published after 2020.

3.1.2 Study Design and Sampling

Half of the studies were conducted using a quantitative method (23/46), 20 were qualitative studies, 1 study used mixed methods, 22 of the quantitative studies were conducted cross-sectionally, and only one was done longitudinally. Sample sizes ranged from 6 to 3,549 participants. Twelve articles had 100 or fewer participants, 11 studies had 100-500 participants, seven studies had 500-1,000 participants, and six studies had 1,000 or more participants.

3.1.3 Target Population

Illustrated in Table 1, 15 studies focused on LGBTQ+ populations without the specifics of race, gender, or ethnicity. Six studies covered just transgender adults. Seven studies covered only gay men. Four studies covered only lesbian or sexual minority women. Two articles covered black sexual minority males (one in youth). Two articles covered male Latino sexual minorities. Two articles covered healthcare professionals. One article covered Latino LGBTQ+ members. Two articles covered young sexual minorities. One article covered PLHIV. One article covered black

LGBTQ+ members. One article covered sexual and gender minorities of color. Finally, 1 article covered ethnically diverse sexual minorities. Seven studies did not provide a mean age of their study sample. The average age of the studies that provided this number ranged from 18.8 to 55.2 years old. One study had average participants in their late teens, 15 studies had average participants in their 20s, 10 studies in their 30s, 3 studies in their 40s, and 1 article averaged in their 50s.

Table 1. 15 studies focused on LGBTQ+ populations without the specifics of race, gender, or ethnicity

Authors (Year)	Ref #	Study Site	Years of data collection	Study sample & size	Age of Sample (mean)	Study design
Baams et al. (2013)	1	Netherlands	2009-2012	192 Dutch young sexual minority (YSM) (Men: 86, women: 106)	Males: 18.8 Females: 19.6	Longitudinal
Bell et al. (2019)	2	Johnson City, USA	n/a	267 LGBTQ+ (Gay men: 97, Lesbian women: 82, Transgender/non-conforming: 138)	TGNC:33.6, GM: 42.5, LW: 38.6	Cross-sectional
Bogart et al. (2020)	3	Los Angeles, CA, USA	n/a	30 Latino sexual minority men (SMM)	48.5	Qualitative
Chan (2022)	4	Hong Kong	n/a	942 Sexual Minority (SM) individuals (female: 510, male: 531)	24.6	cross-sectional
Ching et al. (2022)	5	United States	2017	1627 sexual and gender minority (SGM) adolescents of color	n/a	cross-sectional
DiGuiseppi et al. (2022)	6	Los Angeles, California, USA	2016-2019	448 Young black and Latino sexual minority males (SMM)	22.3	cross-sectional
Drabble et al. (2022)	7	United States	2020	446 sexual minority women (SMW)	n/a	Cross-sectional
Dsouza et al. (2023)	8	n/a	2022	3100 tweets	n/a	Qualitative
English et al. (2022)	9	United States	2017-2018	2033 sexual minority male (SMM) (497 black SMM, 1536 white SMM)	22.0	Cross-sectional
Ghabrial (2017)	10	United States	n/a	11 lesbian, gay, bisexual, transgender, and queer (LGBTQ) ethnic minority	27.0	Qualitative
Gyamerah et al. (2020)	11	Ghana (four cities)	n/a	1382 men who have sex with men (MSM)	n/a	Qualitative
Henriquez & Ahmad (2021)	12	Manitoba, Canada	n/a	12 lesbian, gay, bisexual, transgender, and queer (LGBTQ) adults accessing healthcare	33.1	Qualitative
Hughto et al. (2022)	13	Northeast USA	2019	580 transgender adults	31.3	cross-sectional
Iott et al. (2022)	14	Detroit, Michigan, USA	2016-2017	64 adults gay, bisexual, queer, and other men who have sex with men (GBQMSM)	38.6	qualitative

Jackson et al. (2020)	15	United States	2013-2017	131 Black Lesbian, gay, bisexual, and queer (LGBQ)	31.4	cross-sectional
Kaniuka et al. (2019)	16	United States	n/a	496 lesbian, gay, transgender, and queer (LGBTQ) persons	35.2	cross-sectional
Koziara et al. (2022)	17	Poland	2018	518 sexual and gender diverse peoples (SGDP)	26.9	cross-sectional
Logie et al. (2019)	18	Northwest Territories, Canada	2015	51 northwest territories, Canada (NWT) citizens (youth: 16, adults: 21, key informants: 14)	n/a	qualitative
Logie et al. (2020)	19	Lesotho, South Africa	2015	52 lesbian, gay, bisexual, trans, and key informants. (LGBT persons: 46, Key informants: 6).	Lgbt persons: 28.0	qualitative
Lozano-Verduzco et al. (2019)	20	Mexico City, Mexico	2015	150 lesbian and bisexual women	26.5	cross-sectional
MacCarthy et al. (2021)	21	Los Angeles, CA, USA	2013	30 Latino sexual minority men (SMM)	n/a	qualitative
Malta et al. (2020)	22	Brazil	2017-2018	50 lesbian, gay, bisexual, and transgender (LGBT) peoples	25.5	Mixed method
Milner & McNally (2020)	23	United States	2015	1115 sexual minority women (SMW)	30.8	Qualitative
Moallef et al. (2022)	24	Thailand	2015	1290 lesbian, gay, bisexual, transgender, queer, intersex, etc. (LGBTQI+)	27.0	cross-sectional
O'Connor et al. (2018)	25	NYC, New York, USA	n/a	23 lesbian, gay, bisexual, transgender, and queer (LGBTQ) adults	46.7	Qualitative
Pachankis et al. (2020)	26	Northeast Tennessee, USA	2017	108 sexual minority youth (SMY)	23.9	cross-sectional
Paine (2021)	27	Austin, Texas	2014-2017	73 people (patients: 50, providers: 11, staff members: 12)	n/a	Qualitative
Powers et al. (2021)	28	Australia	2015-2016	872 people living with HIV (PLHIV) (bisexual men: 48, gay men: 681)	Bisexual men: 55.2, Gay men: 49.9	cross-sectional
Quinn et al. (2022)	29	Cleveland, OH & Milwaukee, WI, USA	2018-2020	283 young black sexual minority men (YBSMM)	21.7	cross-sectional
Ronzón-Tirado et al. (2022)	31	Spain	n/a	509 lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people	29.7	cross-sectional
Scandurra et al. (2020)	32	Italy	2018-2019	203 transgender or non-conforming (TGNC) people	30.7	Qualitative
Schmitz et al.	33	Rio Grande Valley,	2016-2017	41 Lesbian, gay, bisexual,	21.0	Qualitative

(2020)		Texas, USA		transgender, and queer (LGBTQ+) Latino/as		
Schwab et al. (2024)	34	Saskatchewan, Canada	2020	16 lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons	n/a	Qualitative
Scott (2022)	35	Piedmont/Eastern, North Carolina, USA	2018-2019	n/a Black sexual minority men (SMM)	n/a	Qualitative
Sileo et al. (2022)	36	Southern USA	n/a	6 Healthcare professionals	n/a	Qualitative
Skerven et al. (2019)	37	n/a	n/a	Lesbian, gay, bisexual, transgender, transgender, and queer (LGBTQ+) studies	n/a	Qualitative
Smith (2020)	38	n/a	n/a	Transgender/gender non-conforming (TGNC) people	n/a	Qualitative
Solomon et al. (2021)	39	United States	2020	385 people (straight: 322, SM: 144)	35.8	cross-sectional
Stojanovski et al. (2022)	40	North Macedonia	2019	71 lesbian, gay, bisexual, transgender, queer (LGBTQ) persons	25.8	Qualitative
Suppes et al. (2021)	41	United States	2010	3594 ethnically diverse sexual minority (EDSM) people	35.6	cross-sectional
Wang et al. (2022)	42	United States	n/a	377 sexual minority males (SMM)	29.6	cross-sectional
Wolfe et al. (2021)	44	Massachusetts & Rhode Island, USA	2019	600 Transgender adults	31.3	cross-sectional
Wolfe et al. (2022)	45	Massachusetts and Rhode Island, USA	2019	527 transgender and gender diverse (TDG) Adults	31.4	Cross-sectional
Zeluf (2018)	46	Sweden	2014	796 Transgender people	n/a	cross-sectional

3.2 Mental and Physical Health

3.2.1 Depression and Psychological Well-being

Data from most of the articles on depression supported the claim that stigma and discrimination increased depression and decreased the psychological well-being of LGBTQ+ populations (Scandurra et al., 2020; Ronzón-Tirado, Charak, & Cano-González 2022; Drabble et al., 2022; Pachankis, 2018; K. Wang et al., 2022; Koziara et al., 2022; Suppes, van der Toorn, & Begeny, 2021; O'Connor, Pleskach, & Yanos, 2018; Iott et al., 2022; Ghabrial, 2017; Wang et al., 2022). Their data were primarily quantitative, except for one qualitative study (Scandurra et al., 2020; Ronzón-Tirado et al., 2022). Studies also conducted mediation analyses and identified factors that helped mediate or reduce the impact of stigma on depression or depressive symptoms: connectedness or social support (Drabble et al., 2022), expressive writing (Pachankis et al., 2020), mentalization (Scandurra,2020), and resilience (Wang et al., 2022; Koziara et al., 2022). In contrast, others found that openness did not have a net benefit for LGBTQ+ mental health, possibly because LGBTQ+ individuals would increase their perception of discrimination as a result (Suppes, van der Toorn, & Begeny, 2021). Another study found that LGBTQ+ individuals received more significant stigma for having mental illness over simply being part of the LGBTQ+ community (O'Connor, Pleskach, & Yanos, 2018). Stress was another common theme in the mental health concerns of LGBTQ+ individuals, as they were found to have additional sources of stress such as HIV testing, rejection, LGBTQ+ community standards, homonegativity/heterosexism, and limited resources due to their LGBTQ+ identity (Iott et

al., 2022; Ghabrial, 2017).

3.2.2 Physical Health

Selected studies concluded a similar outcome regarding the physical health consequences of stigma. The themes included general physical health, self-harm, digestion, physical and sexual violence, and fear during physical health exams (pap smears, breast exams, misdiagnoses, etc.). Studies frequently found harmful effects on health caused by stigma either through qualitative calculations or qualitative collections on the state of participants' physical health or experiences with healthcare appointments (Chan, 2022; English et al., 2022; Ghabrial, 2017; Gyamerah et al., 2020; Dsouza et al., 2023; Logie et al., 2019; Milner & McNally, 2020; Paine, 2021; Wolfe et al., 2022). The most common theme was stigma causing anxiety among LGBTQ+ individuals, which led them to avoid healthcare and tend to their health concerns (this theme will be mirrored in the healthcare services findings as well, proving to be significant with regards to LGBTQ+ health conditions).

3.2.3 Eating Disorders

One article examined eating disorders in LGBTQ+ communities (Bell, Rieger, & Hirsch, 2019); 47.6% of gay men were eating disorder prone, 66.7% of lesbians were eating disorder prone, and 62.6% of TGNC were eating disorder prone; depression symptoms significantly correlated with eating disorder proneness in gay, lesbian, and TGNC participants. Additionally, perceived stigma was also a driving factor that increased the likelihood of an eating disorder in someone who is part of the LGBTQ+ community; this is due to stigma in the community itself holding rigid beauty standards among individuals through ostracizing overweight individuals.

3.3 Suicide

Six studies examined suicide (English et al., 2022; Kaniuka et al., 2019; Zeluf, 2018; Moallef et al., 2022; Pachankis et al., 2020; Ronzón-Tirado et al., 2022). The most significant pattern was how stigma for sexuality and perceived stigma were connected to suicide ideation, behavior, or attempts (English et al., 2022; Kaniuka et al., 2019; Moallef et al., 2022; Ronzón-Tirado et al., 2022; Zeluf, 2018). This is most likely because of the high correlation of stigma and depression or anxiety (Wang et al., 2022). Additionally, adverse mental health (depression, poor psychological well-being) was highly associated with suicidal ideation, behavior, or attempts (Kaniuka et al., 2019; Zeluf, 2018). One article described that self-affirmation improved feelings of suicidal ideation (Pachankis et al., 2020).

3.4 Discrimination

3.4.1 Sexuality Discrimination

To address multiple facets of discrimination, it has been divided into four categories: sexuality, gender, race, and HIV discrimination. Sexuality discrimination was included in 17 articles. Data ranged from simply acknowledging the discrimination that participants faced (Bogart et al., 2020; DiGuiseppi et al., 2022; Ghabrial, 2017; Gyamerah et al., 2020; Malta et al., 2020), sexual orientation stigma negatively impacting LGBTQ+ relationships through anticipated rejection, adverse provider reaction, heteronormative care (Chan, 2022; Milner & McNally, 2020; Logie et al., 2019; Schwab et al., 2024; Wang et al., 2022; K. Wang et al., 2022), and findings suggested that non-gay or non-cisgender LGBTQ+ people experienced more significant stigma (Powers, 2021; Ronzón-Tirado et al., 2022). Other studies found that anti-LGBTQ+ stigma increased self-stigma (Ching et al., 2022) and a lack of group cohesion among rural LGBTQ+ individuals while facing more significant stigma for their sexuality (Scott, 2022).

3.4.2 Gender Discrimination

Six studies included gender discrimination (Baams et al., 2013; Bell, Rieger, & Hirsch, 2019; Henriquez & Ahmad, 2021; Hughto et al., 2022; Sileo et al., 2022; Zeluf et al., 2018). Gender non-conforming (GNC), with three noting that transgender individuals received a more considerable degree of stigma (Baams et al., 2013; Sileo et al., 2022; Zeluf et al., 2018). GNC stigma in healthcare was also common (Bell, Rieger, & Hirsch, 2019; Henriquez & Ahmad, 2021; Sileo et al., 2022). Furthermore, transgender individuals had more prominent concerns about their rights (Hughto et al., 2022). These findings signal that transgender and GNC individuals suffer more significant stigma than other LGBTQ+ communities.

3.4.3 Race Discrimination

Five articles addressed racial discrimination (Bogart et al., 2020; DiGuiseppi et al., 2022; Ghabrial, 2017; MacCarthy et al., 2021; Quinn et al., 2022). One study acknowledged racial and undocumented discrimination in their qualitative study (Bogart et al., 2020; DiGuiseppi et al., 2022). LGBTQ+ individuals of color received stigma in both LGBTQ+ and ethnic minority spaces (Ghabrial, 2017; MacCarthy et al., 2021; Quinn et al., 2022). Ranjit et al. (2021) found HIV stigma in the context of Spanish-speaking communities to match that of English-speaking

communities.

3.4.4 HIV Discrimination

Four articles included HIV discrimination (Bogart et al., 2020; Iott et al., 2022; Quinn, 2022). Common themes were HIV being labeled as “dirty” and “slutty” in the LGBTQ+ community dating scenes (Iott et al., 2022) and how these attitudes prevented LGBTQ+ individuals from getting tested for HIV or avoiding PrEP use (Quinn et al., 2022). This form of discrimination had primarily adverse effects on reproductive health and relationships with other LGBTQ+ community members.

3.5 Drug or Alcohol Abuse

Abuse of drugs and alcohol was relevant in 8 articles in the final selection (DiGuiseppi, 2022; Drabble et al., 2022; English et al., 2022; Logie et al., 2020; Lozano-Verduzco, Castillo, & Padilla-Gámez, 2019; Pachankis et al., 2020; Powers et al., 2021; Wolfe, 2021, 2022). Patterns related to discrimination or stigma through social interactions or law increased LGBTQ+ participants’ alcohol and drug use (DiGuiseppi, 2022; English et al., 2022; Logie et al., 2020; Powers et al., 2021; Wolfe,2021). These studies also found positive correlations between stigma and drug use. In this sense, drug use was a form of self-care where drugs and alcohol acted as coping mechanisms aimed at dealing with the emotional consequences of stigma. Additionally, family support and depression predicted higher rates of alcohol use disorder (AUD) (Drabble et al., 2022; Lozano-Verduzco, Castillo, & Padilla-Gámez, 2019). Substances were also used to mediate the relationship between transgender and gender diverse (TGD) stigma and HIV prevention clinic use (Wolfe, 2021, 2022). Finally, the high rate of alcohol use in LGBTQ+-connected spaces was found to be a common way for community members to bond (Logie et al., 2020).

3.6 Healthcare Services

Healthcare services were relevant to 12 articles and were primarily related to general primary care providers (PCP), quick clinics, and STI clinics. Themes of discrimination were prevalent in all of the selected studies. The historical context of how HIV/AIDS had impacted LGBTQ+ individuals was reflected in Twitter-based reactions to public health measures towards Mpox, which prioritized avoidant behavior (Dsouza et al., 2023). Other studies detailed that LGBTQ+ individuals experienced stigma or discrimination from healthcare providers (Henriquez & Ahmad, 2021; MacCarthy et al., 2021; Sileo et al., 2022; Stojanovski et al., 2022). Such stigma was manifested through judgment (Henriquez & Ahmad, 2021; MacCarthy et al., 2021) assumption of sexuality through HIV diagnosis (Henriquez & Ahmad, 2021; Iott et al., 2022), heteronormativity, cisnormativity, and lack of confidentiality (Iott et al., 2022; Logie, 2019; Schwab et al., 2024; Sileo et al., 2022; Stojanovski et al., 2022). In most cases, this discrimination caused LGBTQ+ individuals to avoid receiving healthcare at all (Logie et al., 2020; Smith, 2020; Stojanovski et al., 2022; Wolfe, 2022). Still, other studies reported that LGBTQ+ individuals also decided to avoid disclosing their sexual identity (Henriquez & Ahmad, 2021). These selected studies suggested that this phenomenon occurred because of the lack of LGBTQ+-focused education and suggested that medical providers receive more education on how to care for LGBTQ+ individuals.

3.7 HIV/AIDS, PrEP & Miscellaneous Illness

3.7.1 HIV/AIDS

HIV and AIDS were brought up in 10 of the selected studies. Two articles (Gyamerah et al., 2020; Iott et al., 2022) covered LGBTQ+ HIV-testing patterns, four studies covered LGBTQ+ discrimination caused by their HIV status (Bogart et al., 2020; Logie et al., 2020; Moallef et al., 2022; Sileo et al., 2022), and two articles (Logie et al., 2020; Wolfe, 2022) described risk behaviors (substance use, condom use, “sexual risk”) that caused LGBTQ+ communities to be more vulnerable to HIV. Additional details included sexual assault increasing HIV risk (Gyamerah, 2020; Logie et al., 2020) and HCP’s assumptions of HIV-positive patients being homosexual (Sileo et al., 2022). A lack of education or training in patient providers explained healthcare-related findings. Sexual risk behaviors or promiscuity received an additional stigma from both healthcare and social circles (Iott et al., 2022).

3.7.2 PrEP

Two articles discussed PrEP use. PrEP use softened the HIV division on GBQMSM as PrEP reduces HIV risks (Iott et al., 2022). Daily discrimination was associated with the likelihood of using PrEP, as study participants with more significant concerns about PrEP use reported a lower connection to the Black LGBTQ+ community and were less likely to use PrEP in the future. Black LGBTQ+ members were subjected to HIV stigma in both black and LGBTQ+ communities; participants separated from fellow black LGBTQ+ communities were less likely to use PrEP, suggesting the critical role the community plays in maintaining good health (Quinn et al., 2022).

3.7.3 Miscellaneous Illnesses

Miscellaneous illnesses include Mpox and COVID-19 in an LGBTQ+ context. Two studies were included on this topic (Dsouza et al., 2023; Solomon et al., 2021). One study encompassed the positive and negative opinions of LGBTQ+ individuals concerning Mpox (Dsouza et al., 2023). LGBTQ+ individuals felt uneasy about public health covering Mpox and felt that stigma against Mpox would prevent research on transmission and vaccinations for the illness. These concerns stem from the HIV epidemic due to the significant problem of Mpox being labeled as a 'gay disease.' Another study covered COVID-19 prevention behaviors among LGBTQ+ individuals and the role stigma played. Self-stigma (sexuality dissatisfaction) was used to predict people leaving home for nonessential reasons. Additionally, belief in negative stereotypes predicted less consistent handwashing and lower frequencies of both face mask use and social distancing in public places (Solomon et al., 2021). Finally, Sexual minorities had significantly more fear of COVID-19 and anxiety about potentially spreading COVID-19 to others when compared to heterosexual participants (Solomon et al., 2021).

4. Discussion

The current review synthesized the existing literature on social stigma and health conditions among LGBTQ+ individuals. Our review found a clear pattern that stigma has negatively impacted both LGBTQ+ physical and mental health. For example, HIV stigma is still prevalent among LGBTQ+ patients, particularly MSM, TGW, and male non-conforming individuals. Moreover, selected studies showed that extensive stigma in healthcare caused LGBTQ+ patients to avoid healthcare appointments, which further exacerbated their health conditions. At the same time, LGBTQ+ individuals in rural settings were limited to heteronormative or cisnormativity-centric healthcare.

While alcohol and drug use were exacerbated by stigma, these coping strategies were a method through which LGBTQ+ individuals built connectedness; the coping mechanisms should be further studied. Additional opportunities for connectedness and group therapy for LGBTQ+ individuals should be considered in hopes of mediating stigma and resulting adverse health effects. For example, programs that aim to strengthen the coping skills of Latino sexual minority men (LSMM) as potential levers may prove effective in addressing health disparities (MacCarthy et al., 2021). These programs can also center around promoting social connectedness, which supports the community's needs to lessen the impact of stigma.

Moreover, further research should be conducted on the social networks of LGBTQ+ individuals and communities. Some of the previous studies of LGBTQ+ networks explored discrimination and social support. The examined topics included schools, parental or family support, heterosexual versus homosexual social spaces, ethnic versus LGBTQ+ identities, and LGBTQ+ pride events. Studies of LGBTQ+ school networks showed that nursing coursework aimed at reducing HIV stigma promoted the presence of community leaders in healthcare (Bernstein et al., 2024), and peer victimization was associated with suicidality and negative social interactions (Hatchel, Merrin, & Espelage, 2019). Gay-straight alliance groups offered leadership opportunities, community opportunities, and safe spaces in schools (Porta et al., 2017). In addition, higher LGBTQ+ support predicted less suicidal behavior and ideation in LGBTQ+ Canadian students (Saewyc et al., 2020), and students who were in more supportive LGBTQ+ environments had lower rates of lifetime illegal drug use, marijuana use, and smoking. A higher number of LGBTQ+ pride events led to lower odds of substance use when compared to places with no LGBTQ+ events (Watson et al., 2020). Social support also remained a protective factor for aging LGBTQ+ adults utilizing healthcare (Loeb, Wardell, & Johnson, 2021).

Family support has been a significant topic in LGBTQ+ networks. For example, families were described as needing education to alleviate their shame towards LGBTQ+ family members in Brazil (Nakhid et al., 2022). In other contexts, however, parental support was seen to buffer the stress of disclosure and depression (Pollitt et al., 2017), even though the period of disclosure to the family was associated with anxiety or depression for fear of rejection (Sammut, 2021). Such findings coincided with a qualitative study showing that gay and lesbian participants with mental illness believed the benefits of disclosure were acceptance and comfort, yet was contrasted with shame, conformity, harm, and discrimination for holding dual disenfranchised identities (Corrigan et al., 2009). These findings indicate that the act of disclosure of sexuality is not easy and that openness and acceptance towards disclosure play an essential role in decreasing the anxiety of LGBTQ+ experiencing social stigma.

Social networks between LGBTQ+ individuals and heterosexuals have also been underscored in the existing literature. For instance, lesbian and gay people who felt that their LGBTQ+ ingroup was legitimate, porous, and stable compared to heterosexual outgroups engaged in individual strategies. On the other hand, interdependent groups were more likely to engage in a collective strategy (Aybar Camposano, Rodrigues, & Moleiro, 2022), while gay men were more likely to dissociate from LGBTQ+ ingroups. Stigma and respectability also caused gender silencing, exclusion, and rejection (Nakhid et al., 2022). Discrimination prevented LGBTQ+ individuals from

seeking feelings of acceptance (Wilson & Liss, 2022). A few studies covered dialogues on substance use, queer health, and social responsibility in LGBTQ+ networks, acknowledging privilege, breaking stereotypes, and coalescent learning (Brondani et al., 2020). Primary concerns for transgender individuals were that of coming out, reciprocal support from relationships, social transitions, gender identity affirmations, and experiences in the LGBTQ+ community; the most essential aspect for transgender individuals was support from relational partners (Lewis, Barreto, & Doyle, 2023). In India, introducing a community-based theater increased acceptance of prosocial behaviors toward the LGBTQ+ community and led to a greater understanding of the importance of supporting LGBTQ+ individuals (Pufahl et al., 2021). The identified knowledge about social networks among LGBTQ+ individuals could be utilized for stigma reduction programs.

Furthermore, future studies should work to promote ways to educate and work with more LGBTQ+ healthcare providers (HCPs). LGBTQ+ individuals largely believed their HCPs might hold biases and lack education on their needs (Coker et al., 2010; Sevelius et al., 2014), which prevented them from receiving healthcare, especially for HIV/STI testing (Kaufman, Avgar, & Mirsky, 2007; Whitehead, Shaver, & Stephenson, 2016). These barriers did impact the healthcare of LGBTQ+ communities, as evidenced by the higher prevalence of chronic conditions and STIs in LGBTQ+ patients compared to their heterosexual and cisgender counterparts (Centers for Disease Control and Prevention, 2018; Elliott et al., 2015; Simoni et al., 2017; Wanta et al., 2019). The effect of comradery cannot be understated; seeing other LGBTQ+ members existing in public spaces has positively affected a population's health, as demonstrated by findings among black LGBTQ+ individuals (Quinn et al., 2022). Having insider HCPs could aid in understanding the specific needs of LGBTQ+ communities; this could be another tool for addressing health disparities. Thus, various ways the LGBTQ+ community educates HCPs should be further examined.

Furthermore, future research should examine intersectional stigma among LGBTQ+ communities, as individuals may experience stigma for their sexuality, race, mental illness, HIV status, and other factors based on their identity (Chan, 2022; Bogart et al., 2020). For example, sexual minorities of color are at greater risk for poor mental and physical health because they experience racial discrimination in addition to sexual minority stressors (Balsam, Molina, Beadnell, et al. 2011; McConnell et al., 2018; Diaz et al., 2001). In the Arctic region of Canada, the colonization of indigenous people, insufficient healthcare resources, and limited transportation were a significant reason for avoiding healthcare (Allen, Levintova, & Mohatt, 2011; Law et al., 2008). Involvement in sex work was also associated with higher levels of stigma, discrimination, sexual abuse, torture, and attempted murder. For example, Dominican TGW who engaged in sex work received less social support than non-sex work peers (Milner et al., 2019); TGW involved in sex work were associated with a higher level of stigma, and those who experienced violence were at higher HIV risks (Budhwani et al., 2021). In addition, we should also consider the concerns of LGBTQ+ individuals from a culturally less accepting of sexual minorities (Ghabrial, 2017), which highlights the importance of local settings for inclusive care.

Moreover, future intervention programs targeting LGBTQ+ populations should spread to more remote, rural locations to mediate the mental, physical, and unfavorable healthcare experiences among rural LGBTQ+ individuals. There is an urgent need for more empirical studies on intersectional stigma – particularly those targeting the most vulnerable subpopulations among sexual minorities. Transgender people of color, for example, are relatively invisible in research and neglected in healthcare policy (Baur, Bruchez, & Schlaffer, 2013). Paying more attention to intersectional stigma will provide a more comprehensive and nuanced understanding of the intersections between stigma and various facets of identities.

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Appendix

Appendix Table 1.

Author (Year)	Ref #	Mental health/Physical health	Suicide	Discrimination	Drug/alcohol abuse	Healthcare services	HIV/AIDS/PrEP/other illnesses
Baams et al. (2013)	1	Gender nonconformity was found to predict lower levels of psychological well-being (r (182) = .24, p = .001). Perceived experiences of stigmatization mediated the relation between gender nonconformity and well-being (B = -.03, Bootstrap 95 % confidence interval -.08, -.01).	n/a	mediation analysis confirmed that lower levels of psychological well-being were related to the perceived experiences of stigmatization	n/a	n/a	n/a
Bell et al. (2019)	2	Gay ED prone: 47.6% Lesbian ED prone: 66.7% TGNC ED prone: 62.6% Depression (PHQ) correlates ED in all demographics.	n/a	Perceived stigma scale (pss) gay mean: 27.35 PSS lesbian mean: 26.75 PSS TGNC mean: 31.52. PSS correlates ED to all demographics.	n/a	n/a	n/a
Bogart et al. (2020)	3	Anger: (baseline: M [SD] = 0.84 [0.57]; follow-up: M [SD] = 0.60 [0.41]; b [SE] = −0.23 (0.10), p = .03) Sadness: (baseline: M [SD] = 0.84 [0.53]; follow-up: M [SD] = 0.59 [0.39]; b [SE] = −0.25 [0.11], p = .03).	n/a	HIV discrimination: (α = .91) SMM discrimination: α = .67 Race discrimination: (α = .92) Undock discrimination: (α = .73)	n/a	n/a	HIV discrimination mean: 19 (63)
Chan (2022)	4	Offline heterosexist & physical health: (B = –1.64, β = –0.17, p < .001) Offline heterosexist & mental health: (B = –2.05, β = –0.13, p	n/a	Online heterosexist experiences associated w/ expectations of rejections: (B = 0.16, β = 0.15, p < .001)	n/a	n/a	n/a

		< .001). Online heterosexist & physical health: (B = –0.57, β = –0.07, p = .03) Online heterosexist & mental health: (B = –0.96, β = –0.08, p = .02)		heterosexist experiences on physical health mediated by expectations of rejection (online: B = –0.11, 95% CI = –0.22, –0.03; offline: B = –0.16, 95% CI = –0.33, –0.05)				
Ching et al. (2022)	5	LGBTQ climate on depressive symptoms (β = −.24, p < .001). Microaggression-related stress and depressive symptoms (β = .17, p < .001; indirect effect = −0.06, p < .001, 95% CI [−0.08, −0.04]).	n/a	LGBTQ accepting climate (β = −.34, p < .001). LGBTQ climate & internal stigma: (β = −.25, p < .001). LGBTQ stigma, less positive climate, micro aggression related stress:(β = .15, p < .001) LGBTQ climate and internalized LGBTQ stigma (β = −.25, p < .001). Microaggression- related stress (β = .18, p = .002).	n/a	n/a		
DiGuiseppi et al. (2022)	6	Depressive Symptoms: 4.0 General Stress: 7.48 Depressive symptoms over time: (intercept = 3.99, SE = 0.18, p < 0.01; slope = □0.17, SE = 0.05, p < 0.01).	n/a	Homonegative discrimination: 2.71 Racial discrimination: 6.76 Internalized homonegativity: 1.65	Unhealthy alcohol use (AUDIT score): 6.58 Alcohol use over time: (intercept = 6.54, standard error [SE] = 2.49, p < 0.01; slope = □0.26, SE = 0.07, p < 0.01).	n/a	Positive HIV status: 51 (11.4%)	
Drabble et al. (2022)	7	Depression and personal impact: 0.98	n/a	Lesbian/gay stigma concerns: 59.10	AUD and personal impact: 1.00	n/a	n/a	

		Depression and stigma concerns: 1.01 Depression and family support: .73 Depression and work/school support: 0.85 Depression and social climate: .84 Great health and personal impact: 1.01 Great health and stigma concerns: .98 Great health and family support: 1.65 Great health and work/school support: 1.03 Great health and social climate: 1.14		Bi stigma concerns: 54.76 Queer/else stigma concerns: 68.29 Lesbian/gay fam support: 2.71 Bi fam support: 2.65 queer/else fam support: 2.59 lesbian/gay work support: 4.48 Bi work support: 4.03 Queer work support: 4.15 lesbian/gay social climate: 7.08 Bi social climate: 6.54 Queer social climate: 5.96	AUD and stigma concerns: 1.01 AUD and family support: 1.21 AUD and work/school support: 1.3 AUD and social climate: 1.06		
D'souza et al. (2023)	8	Stigma and misinformation limit transmission, vaccine, and diagnosis knowledge.	n/a	Mpox is labeled as the “gay man disease”.	n/a	LGBT community tweets refrain from public health measures due to HIV history.	Mpox tweets Vader positive: 42.24% Text blob positive: 81.95% Flair positive: 7.83 Vader negative: 45.1% Text blob negative: 13.66% Flair negative: 92.17%
English et al. (2022)	9	Anti-LGBTQ+ and self-harm 0.79, SE = 0.30, p = .009) Anti LGBTQ+ policy and depression: (b = 0.62, SE = 0.31, p = .05) Black perceived burdensome: 0.88-	Anti LGBTQ+ policy and suicide ideation: (b = 0.66, SE = 0.29, p = .02), Anti-lgbtq policy and suicide attempt 1.09, SE =	n/a	Anti-lgbtq policies and heavy drinking: (b = 0.12, SE = 0.06, p = .04) Racism X anti-LGBTQ policies X age	n/a	n/a

		0.97 Black thwarted belongingness: 0.62-0.89	0.46, p = .02).		associated with heavy drinking.		
Ghabrial (2017)	10	4/11 report stress and anxiety affect health. 2/11 report digestive problems due to stress 1/11 medicated for anxiety attacks. 3/11 explains anxiety common in LGBTQ+ by rejection, limited resources, and expectations in the LGBTQ+ community.	n/a	6/11 discomfort in the local LGBTQ+ community due to past racism. 7/11 stigmatized identities created everyday challenges. 5/11 present to conceal sexual identity, 4 due to their race/ethnic identity. 7/11 report coming out to only 1 parent. ¾ of queer&trans participants concealed both identities from parents. 11/11 believed coming out pressure does not consider racial and ethnic experiences.	n/a	n/a	n/a
Gyamerah et al. (2020)	11	2.8%-12.8% experience physical violence 12.3%-30% experience sexual violence in last year	n/a	6.2%-30.6 % were refused service. 1.8%-12.8% verbal/symbolic violence	n/a	n/a	Testing HIV in last year: 28.5%-35.9% MSM rape as 1st experience less likely to test in Accra (AOR 0.6; 95% CI 0.4–1.0) and Cape Coast (AOR 0.5; 95% CI 0.3–0.9).
Henriquez et al. (2021)	12	Discrimination described as “exhausting” and “tiring”.	n/a	Gender dysphoria diagnosis test troubling and undo inner work for illness label.		Fear disclosing sex orientation due to previous discrimination,	

						reported as a “risk”. All subject to judgment and assumption from providers. All subject to refusal of care.	
Hughto et al. (2022)	13	Those concerned about rights had greater odds of depression (aOR=1.97; p=0.02), anxiety (aOR=2.76; p=0.003), and PTSD (aOR=2.47; p<0.0001).	n/a	48.4% were concerned states pass policies against trans rights.	n/a	n/a	n/a
Iott et al. (2022)	14	Stress and responsibility of testing are emotionally challenging to participants.	n/a	HIV tests after “slutty” behavior promote stigma. Grindr references ‘clean’ status helping stigma. Fear of rejection fueling barriers to testing sexual, family, friends, etc.	n/a	Concerns of privacy of status, clinician reactions, promiscuity judgment, intersectional stigma, and denial of care.	Mean # times tested for HIV: 6.94. 31 HIV positive (48.4%) 33 HIV negative/unknown (51.6%) PrEP use soften HIV division in GBQ MSN
Jackson et al. (2020)	15	Negative IEs related to identity conflict and negative affect. Negative IEs related to negative rumination at within-person level. Positive IEs predicted positive rumination and effects.	n/a	Negative i.e.: 97 days (11.4% of total days) Positive i.e.: 263 days (31% of total days)	n/a	n/a	n/a
Kaniuka et al. (2019)	16	Anxiety related to suicidal behavior (b=9.19, SE 1⁄4 .03, p < .001) Connectedness operates as a protective factor on the “a” path of the model, weakening the association between perceived stigma and depressive symptoms.	Suicidal behavior positively related to depressive symptoms, anxiety symptoms, and perceived stigma. (r= .59, p < .001, r= .48, p < .001, r= .28, p < .001).	Perceived stigma related to greater anxiety symptoms (a = 4.77, SE 1⁄4 .04, p < .001) Psychopathology mediated the association between perceived stigma and suicidal behavior. Connectedness	n/a	n/a	n/a

			connectedness moderated relation of perceived stigma and suicidal behavior (b= .01, SE = .01, t (293) =2.96, p < .01)	moderated the relation between perceived stigma and depression.			
Koziara et al. (2022)	17	Depression is negatively related to age. SDCM demonstrated increased resilience, reduced depressions, and higher self-esteem.	n/a	Stigma exposure mean: 2.40. Resilience means: 3.51	n/a	n/a	n/a
Logie et al. (2019)	18	n/a	n/a	Heteronormative and cisnormativity care limit the access (transgender care and HIV stigma).	n/a	Participants concerned over confidentiality. Participants struggle with geographical access, and long wait times to access healthcare. Participants suggest non-judgement, LGBTQ specific knowledge, and gender inclusive services to mediate.	HIV and STI discrimination from providers (mainly youth patients).
Logie et al. (2020)	19	Sexual violence against lesbian and transgender individuals as "corrective".	n/a	n/a	Substance use, depression, and HIV mutually reinforcing among participants. Alcohol uses a stigma coping strategy and way to build LGBTQ connectedness.	Stigma and exclusion reinforce barriers to healthcare engagement.	Substances use a barrier to condom use, making them more HIV vulnerable. HIV associated with promiscuity, fuels stigma. Physical and sexual violence also increase HIV vulnerability.
Lozano-Verduzco et al.	20	Lesbian and bisexual women have cognitive and emotional	n/a	n/a	Regression model to predict problem w/	n/a	n/a

(2019)		consequences from homonegativity connected to mental health.			alcohol and fear of rejection: 0.485. Prediction of depression and problems with alcohol: 0.163 Prediction of alcohol use and problem w/ alcohol: 1.643		
MacCarthy et al. (2021)	21	Coping strategies included social support, self-advocacy, external attribution, and spirituality/positive reframing.	n/a	Mostly inter-group discrimination based on Latinx ethnicity, residency status, and sexual minority status in family and home communities.	n/a	Participants saw HIV discrimination in healthcare engagement (receptionists and medical professionals).	n/a
Malta et al. (2020)	22	66% generalized anxiety disorder 46% major depressive disorder 39% PTSD	n/a	60+% interpersonal discrimination 46% institutional discrimination 80% verbal abuse 40% physical assault	n/a	n/a	n/a
Milner et al. (2020)	23	Same psychological variables positively associated with never obtaining a pap test. 32.3% not on schedule for clinical breast exam.	n/a	Concealment, stigma consciousness, rejection sensitivity, and fear of negative evaluation positive with low rates of timely Pap tests.	n/a	31.8% disclosed SM status to providers.	n/a
Moallef et al. (2022)	24	n/a	Suicidal ideation and higher perceived/enacted stigma: 237/417 Suicidal attempt and higher	sex/gender stigma positively associated with suicide attempt ([AOR] = 1.25; 95% confidence interval CI:1.10–1.41 and AOR = 1.31; 95% CI:1.11–1.55) and	n/a	n/a	HIV positive and higher perceived/enacted stigma: 15/23 HIV testing and perceived/enacted stigma: 304/318

			perceived/enacted stigma: 61/156	ideation (AOR = 1.30; 95% CI:1.17–1.43 and AOR = 1.34; 95% CI:1.14–1.58)			
O'Connor (2018)	25	Endorsed more stigma to having mental illness than being queer.	n/a	Participants marginalized from both identities (dual alienation). Experiences of stigma and self-stigma relevant to mental illness more distressing than those pertaining to being LGBTQ.	n/a	n/a	n/a
Pachankis et al. (2020)	26	Expressive writing for 3 months improved depressive symptoms (d=0.48) and psychological distress (d=0.36)	Self-affirmation improved suicidal ideation (d=o.62)	Those exposed to greater discrimination improved depression and suicidality in both exercises.	Self-affirmation improved drug abuse (d=0.59)	n/a	n/a
Paine et al. (2021)	27	Fat people at risk of misdiagnosis.	n/a	Weight bias interpreted as intersectional stigma. Concerned being shamed into weight loss. Overlap with trans healthcare experience. Stigmatized for both fat and queer identity.	n/a	Reported "fat broken arm syndrome," patients attributed patients' health concerns to weight. Providers frame fat as an urgent health risk to "do no harm".	n/a
Powers et al. (2021)	28	Bi men report more negative self-image and poorer emotional wellbeing than gay men.	n/a	Bi men report higher HIV stigma than gay men. Bi men report less social support ($t = 4.17$, $p < 0.001$) and less connection with LGBTQ community ($t = 3.91$, $p < 0.001$.	Non-medical drug use: 558 Injecting drug use: 99 Alcohol treatment: 20	n/a	Bi men report less connection with other PLHIV ($\chi2 = 10.4$, $p = 0.02$). Undetectable: 637 Detectable/unknown: 92
Quinn et al.	29	n/a	n/a	Greater discrimination	n/a	n/a	Daily discrimination

(2022)				was associated with higher levels of resilience, social support, and connection to the Black LGBTQ community. Social support mediated the effect of day- to-day discrimination on likelihood of future PrEP use. Higher levels of anticipated discrimination were less likely to be current PrEP users (OR=0.59, p=.013).			associated with likelihood of using PrEP in the future (B = 0.48 (0.16), p = .002). Currently using prep: 247 Participants with more social concerns about PrEP use reported a lower connection to the Black LGBT com- munity, B = -0.11 (0.06), p=.037, and were less likely to use PrEP in the future, B = -0.23 (0.09), p=.013.
Ranjit et al. (2021)	30	n/a	n/a	Enacted, anticipated, and internalized stigma, with eight items had an adequate fit to the data. The Spanish version (HIV Stigma Scale-ES) and its dimensions are like the ones validated in English for people with HIV (not MSM). Each construct was deemed to be reliable and showed good construct validity.	n/a	n/a	n/a
Ronzón-Tirado et al. (2022)	31	Higher levels of heterosexist experience had more symptoms of depression. Depressive symptoms: 47.4%.	Higher levels of heterosexist experiences had higher suicidal behavior. Suicidal behavior:	Sexual minority and transgender identities indicated higher levels of heterosexist experiences. Vicarious trauma: 99.8%	n/a	n/a	n/a

			46.1% Suicidal ideation/attempt: 77.3%.				
Scandurra et al. (2020)	32	Rejection and IT were positively associated with mental health. IT mediated the relationship between rejection and mental health. Mentalization moderated the relationship between rejection and IT with mental health. Anxiety and depression correlate with rejection and IT.	n/a	n/a	n/a	n/a	n/a
Schmitz et al. (2020)	33	Participants accuse their "culture" for harming mental health, highlighting the intersection of minority stress as LGBTQ and Latinx persons. No "one size fits all" approach in addressing health outcomes.	n/a	LGBTQ1 Latino/young adults experience structural racism, gender policing, and anti-LGBTQ1 religious messages in relation to their mental health.	n/a	n/a	n/a
Schwab et al. (2024)	34	n/a	n/a	Participants concerned over stigma after disclosing sexuality or gender either through internalization or through lack of knowledge from providers (pronoun misuse, judgment, etc.) Perceived stigma: not too often (9), quite often (4), never (2), and very often (1).	n/a	Participants do not trust providers on sexuality and gender for diverse care options. Participants suggest mandated training/seminars from LGBTQ+ population would be effective. Frequency of healthcare: Quite often (11), not too	n/a

						often (2), and very often (3)	
Scott (2022)	35	n/a	n/a	Long standing instances of anti-gay violence in intimate and public spaces. Fostered group cohesion. community centers to destigmatize but focus on urban scapes.	n/a		Study frayed away from HIV context for the need of rural LGBTQ+ spaces.
Sileo et al. (2022)	36	n/a	n/a	Stigma drivers were a lack of knowledge, as providers were educated under gender binary. Policy also did not drive to reduce this stigma. Participants reported misgender, gossip, and prejudicial attitudes.	n/a	Providers unknowledgeable of transgender care needs because of training-denial of responsibility in some cases.	Stigma manifested in HIV care- assumption as a “gay disease” with patients.
Skerven et al. (2019)	37	Enhance self-validation skills and improve pathways towards affirming their identity.	n/a	DBT is shown to help LGBTQ+ clients effectively interact with structural stigma.	n/a	n/a	n/a
Smith et al. (2020)	38	Combination of stigma, social and structural inequalities, and actual discrimination events result in mutually reinforcing dynamics that drive persistent and stubborn disparities in physical and mental health for TGNB persons.	n/a	Minority stress contributes to poorer health outcomes for sexual and gender minority populations.	n/a	Minority stress creates reduced quality of care for sexual and gender minority populations.	n/a
Solomon et al. (2021)	39	n/a	n/a	Different facets of internalized sexual minorities predicted varying preventative health behaviors.	n/a	n/a	Sexuality dissatisfaction predicted leaving home for nonessential reasons (3.02 (SD □ 5.43 times in the past two weeks).

							Belief in negative stereotypes predicted less frequent handwashing, less use of face masks, and social distancing in public places. Sexual minority participants had significantly more fear of COVID-19 and anxiety about potentially spreading COVID-19 to others than heterosexual participants
Stojanovski et al. (2022)	40	Minority stressors challenging mental health and access to mental health services.		Living in a smaller/rural area exacerbated stigma and mental health.		Unethical (lack of discretion and confidentiality) experiences in mental health services limited access. Good mental health care was not readily available for participants.	
Suppes et al. (2021)	41	Opposing forces explain weak association between greater openness and mental health-openness does have a net benefit for LGBTQ + individuals' mental health.	n/a	Openness and strengthened identity importance simultaneously prompt increased perceptions of discrimination, the burden of which adversely affects mental health. Balances the benefits of openness to mental health.	n/a	n/a	n/a
Wang et al. (2022)	42	Perceived sexual orientation–related discrimination was positively associated	n/a	Longitudinal results revealed that perceived	n/a	n/a	n/a

		with psychological distress (r=.33, p< .001) Expressive flexibility negatively correlated with psychological distress (r= -.18, p<.001). The association between discrimination and psychological distress measured 1 year later was significant for sexual minority men with very low levels of expressive flexibility (b=.67, SE=.11, t=6.30, p,.001,95%CI[.46,.88],b=.31,and suppression ability, b = .16, SE = .07, t = 2.20, p = .028, 95% CI [.31, .02], b = .11).		discrimination at T1 was significantly associated with more psychological distress at T2 at very low levels of EF ($ 2.7 SDs below the mean).			
Wang et al. (2022)	43	Sexual minority stigma is positively related to depression. This relation was mediated by resilience (β = 0.06, 95% CI [0.02, 0.10]) and family support (β = 0.02, 95% CI [0.002, 0.05]).		Sexual minority stigma is negatively related to resilience (r = −.24, p < .001) and family support (r = −.22, p < .001).	n/a	n/a	n/a
Wolfe et al. (2021)	44	n/a	n/a	Mean transgender-related discrimination: 20.8 (SD = 9.6, range = 0–44)	SUD diagnosis: 11.8%. Highest quartile of transgender-related discrimination was significantly associated with higher past 12- month substance use (B = 1.44; aR2 = 0.13; p = .009), SUD diagnosis (aOR = 3.64; 95% CI = 1.46–9.07; p = .006), and lifetime treatment history (aOR = 3.93; 95% CI = 1.50–	. n/a	n/a

					10.21; p = .005)		
Wolfe et al. (2022)	45	71.46% of the study at some point received any medical gender-affirming care.	n/a	n/a	Substance use mediated relationship between THE stigma and HIV prevention clinic utilization (b = 0.08; 95% CI = 0.05, 0.17; P = 0.03) 43.67% utilized substances last year.	9.07% received HIV prevention clinic services.	HIV sexual risk behavior mediated relationship between THE stigma and HIV prevention clinic utilization (b = 0.26; 95% CI = 0.14 to 0.37; P, 0.001) 48.77% study HIV tested in last year. 94.14% of the study did not use PrEP.
Zeluf et al. (2018)	46	Unsatisfaction with psychological wellbeing associated w/ suicide ideation in past year.	32% attempted suicide 37% contemplated suicide. Less practical support associated with lifetime suicide attempts.	Lifetime exposure to trans violence associated with suicidality. 64% reported fear of discrimination.	n/a	n/a	n/a